

SEAN BURGESS

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Languages & Aptitudes

Python (NumPy, Pandas, Matplotlib, Plotly Express, Scikit-Learn, PyTorch), SQL, Git, HTML, CSS, Tableau, gretl, MS Office

Technical Skills

Regression (Linear, Logistic), Classification (K-NN, SVM, Random Forest), Data Cleaning & Interpretation

EDUCATION

University of Houston

Graduated 2020

Mathematics, B.S.

Minor in Economics

Courses: Computer Science & Programming (Python), Intro to Programming (C++), Computing for Engineers (MATLAB), Advanced Linear Algebra, Probability, Statistics, Stochastic Processes

Udacity

In Progress

Deep Learning Nanodegree

Skills Covered: Deep Learning, Neural Networks, CNNs, RNNs, GANs

PROJECTS

Dog Breed Classifier using CNNs

- Detected dogs, human faces, or neither from an input image
- Predicted dog breeds using convolutional neural networks
- Implemented a CNN from scratch (10% accuracy) and from transfer learning (84% accuracy)

Bayesian Analysis in Predicting Overconfidence

- Simulated a population of entrepreneurs distributed among three skill types
- Tested a multitude of scenarios in which the entrepreneurs learn from prior experience
- Analyzed perceived skill distribution to predict overconfidence

Currency Crises

- Combined two large data sets from the World Development Indicators DataBank
- Trained decision trees and identified accurate classifiers in MATLAB
- Predicted currency crises within rich countries

EXPERIENCE

Mathematics Tutor

Current

FindTutors, Peer Tutoring

- Tutor in all areas of mathematics up to a high school level, such as pre-calculus and statistics
- Tutor former peers and colleagues in university level mathematics, such as probability and calculus

Assistant Manager

December 2017 - September 2018

Nekter Juice Bar

- Directed and managed team members
- Counted cash drawer and logged daily profits